

Q6 12 ~~9~~ (Amended) The polymer gel contact mask of claim ~~2~~¹² wherein the hydrogel is formed by polymerization of a polymer precursor composition comprising one or more chemically distinct monomer compounds and a crosslinking agent wherein the crosslinking agent is present in an amount of about 1 mole percent to about 5 mole percent with respect to the total monomer compound content.

Q7 18 ~~14~~ (Amended) The contact mask of claim ~~10~~¹⁴ wherein the polymer gel is selected from the group consisting of polyphosphazenes; polyacrylates; polymethacrylates, poly(ethylene glycol), poly(ethylene glycol) acrylates, poly(vinyl alcohol), polyethylene glycol methacrylates, 2-(trimethoxysilyloxy)ethyl methacrylate, trimethoxysilyloxy alkyl methacrylate, trimethoxy silyl alkyl methacrylate, polyvinylpyrrolidinone and carbohydrate-based hydrogel polymers, heparin, heparin sulfate, hyaluronic acid, polylactic acid, polybutadienes, hydrogels, and combinations thereof.

19 ~~15~~ (Amended) The polymer gel contact mask of claim ~~10~~¹⁴ formed by complementary molding.

22 ~~53~~ (New) A hydrogel contact mask wherein the hydrogel comprises polymer chains of polyHEMA and the polymer chains are co-polymers of HEMA, a hydrophobic monomer and, optionally, a crosslinking agent.

23 ~~54~~ (New) A hydrogel contact mask wherein the hydrogel comprises polymer chains of polyHEMA and the polymer chains are block co-polymers of HEMA and a biodegradable polymer.

Q8 10 ~~55~~ (New) The polymer gel contact mask of claim ~~2~~¹⁰ wherein the polymer gel is a hydrogel or polyelectrolyte gel.

24 ~~56~~ (New) A patterning transfer element comprising a polymer gel for patterning biological materials, wherein the polymer gel comprises a HEMA copolymer.

25 ~~57~~ (New) A polymer gel contact mask wherein the polymer gel comprises a HEMA copolymer.

²⁵
~~26~~ 58. (New) The contact mask of claim ~~57~~ comprising at least one hole therethrough.

⁵
~~11~~ 59. (New) The contact mask of claim ~~2~~ wherein the mask is located on an inanimate substrate.

² ~~60~~. (New) The patterning transfer element of claim 1 wherein the patterning transfer element is a stamp.

³ ~~61~~. (New) The patterning transfer element of claim 1 wherein the patterning transfer element is applied to an inanimate substrate.

⁴ ~~62~~. (New) The patterning transfer element of claim 1 wherein the patterning transfer element conforms to a surface of a substrate upon contact with the surface.

Q8 ⁵
~~17~~ 63. (New) The contact mask of claim ~~2~~ wherein the mask is in conformal contact with a surface upon which the mask is located to provide a seal between the mask and the surface.

¹⁴
~~20~~ 64. (New) The contact mask of claim ~~10~~ wherein the mask is in conformal contact with a surface upon which the mask is located to provide a seal between the mask and the surface.

¹²
~~13~~ 65. (New) The contact mask of claim ~~63~~ wherein the surface is the surface of a culture dish for culturing cells.

¹³
~~21~~ 66. (New) The contact mask of claim ~~64~~ wherein the surface is the surface of a culture dish for culturing cells.

REMARKS

Reconsideration of the subject patent application is respectfully requested in view of the preceding amendments and for the following reasons.

Claims 16-52 have been withdrawn as a result of a restriction requirement.